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March 24, 1992

Meeting Minutes Transmittal/Approval 300-FF-5 Operable Unit Managers Meeting 345 Hills Street, Richland, WA February 27, 1992

FROM/APPROVAL: Zui) Golle Date 3-26-92	
Eric D. Goller, 300-FF-5 Unit Manager, RL (A5-19)	
APPROVAL: Was K. Em Date 26 Mar 82	
Dave Einan, 300-EE-5 Unit Manager, EPA (B5-01)	
APPROVAL: Date $4/2/9/2$	
Charles S. Cline, 300-FF-5 Unit Manager, WA Department of	_
' Ecology	
	_
Meeting Minutes are attached. Minutes are comprised of the following:	
Attachment #1 - Meeting Summary/Summary of Commitments and Agreements.	
Attachment #2 - Attendance List for 300-FF-1 and 300-FF-5. Attachment #3 - Agenda For 300-FF-5 Meeting.	
Attachment #4 - Action Items Status List.	
Attachment #5 - 300-FF-5 Operable Unit RI/FS Work Progress.	
Attachment #6 - 300-FF-5 Remedial Investigation Summary Schedule.	
Attachment #7 - Plan for Second Round Groundwater Sampling For 300-FF-5. Attachment #8 - 300 Area Water Level Elevations: SWS-1 and Well 1-16B.	•
Attachment #8 - 300 Area Water Level Elevations: SWS-I and Well 1-16B. Attachment #9 - 300 Area River Stage Fluctuations.	
Attachment #10 - Change Form 300-FF-5-13: Phased Approach to Aquatic	
Sampling.	

PREPARED BY:

SWEC Support Services

Date<u>3/26/42</u>

CONCURRENCE BY:

L.C. Hulstrom

Date 3/96/9

L. Hulstrom, WHC FF-5 RI Coordinator

Meeting Summary

-300-FF-5 Operable Unit Managers Meeting February 27, 1992

Action Item Update

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- 1. The status of outstanding action items was updated and the changes are reflected in the table shown in Attachment #4.
 - Action Item #3FF5.15 was closed at the January UMM.
 - Action Item #3FF5.16: Larry Hulstrom provided a draft of the well summary sheets from borehole 1C (pgs. 3 & 4) which was compiled from 23 pages of field notes and a corresponding sample log summary (pgs. 5 & 6). Dave Einan stated that the report format fulfilled their needs, but that EPA wanted to see data for all boreholes in order to close the action item. It was agreed that L. Hulstrom would provide xerox copies of all handwritten borehole field logs by or before the March UMM.
 - Action Item #3FF5.17 was closed at this meeting based on information presented at the January UMM.

300-FF-5 Operable Unit RI/FS Activities/Work Progress

- 2. Larry Hulstrom (WHC) presented the status of remedial investigation /feasibility study (RI/FS) activities. These activities are described in Attachments 5 and 6.
- 3. Larry Hulstrom received preliminary field screening data from PNL on February 26 which appears to confirm the elevated levels of TCE and DCE present in wells 16B and 16C (described in Attachment 5, page 3). L. Hulstrom discussed a working hypothesis to explain the presence of high concentrations of TCE and DCE at one location. The data might be explained by a low point in the confined and unconfined aquifer in the area of the 1-16 site which might act to pool and confine these dense volatile organic molecules. On the basis of this hypothesis, L. Hulstrom recommended that it would be inadvisable to disturb the system by further remediation of 16D until more information is known. L. Hulstrom also observed that remediation could be facilitated if the TCE and DCE were pooled rather than dispersed.

Dave Einan and Eric Goller raised concerns that the increased sampling frequency might disturb the site. L. Hulstrom agreed to ask PNL about their sampling protocols (with respect to purge volumes) and continue the discussion with E. Goller and D. Einan after the information was obtained.

Plan For Round 2 Groundwater Sampling/Analysis: RCRA/CERCLA Integration

4. The plan for round 2 groundwater sampling is presented in Attachment 7. The strategy is to include data gathering activities to study the comparability of values obtained via CLP and SW-846. Central to the experimental design is the choice of wells containing analytes known to be above detection limits.

Proposed Phased Approach to Aquatic Bjota Sampling.

5. Charles Brandt presented the proposed phased approach to aquatic biota sampling (Attachment 10) which involves deferring some of the studies to the Phase II RI. The justification arises from the work plan which describes initial studies of lower trophic levels followed by studies of higher trophic levels only if deemed necessary after data evaluation of lower trophic levels. The strategy of the change order reflects the spirit of the work plan, but clarifies some phrasing concerning the study of the aquatic biota. Implementation of the change order will impact the baseline risk assessment, i.e. the baseline risk assessment would be generated by extrapolation from the primary producer contaminant concentrations up the food chain.

Change Orders

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Change order 300-FF-5-13 (Item 5 above and Attachment 10) addresses the proposed phased approach to aquatic biota sampling. (This attachment was approved and distributed on February 27).

Attendance 300-FF-1, FF-5 Operable Units Managers Meetings February 1992

	Name	Org.	O.U. Role	Phone
	Bill MCClura	5/006C	<u>653C</u>	(829) 376-1853
	Karl N. Pool	WHC-05M		<u>(509) 373-313</u> 7
	Suranne Marke	<u>sux</u> c	<u>655C</u>	<u>(509) 372-06.30</u>
	Kathy Knex	CWES	6ssc	509 376-5011
	Larry Hulstrom	WH	Ou Coordin.	(509) 376 - 4034
	Bob McLesd	DOE-KL	<u>lun</u>	(509) 372-0096
	Coerge C. HaickelII	WHC	OU rendonates	(29) 376-1994
	Hal Downey	<u> </u>	ER Proper	(201) 376-2236
CV.	Brian W. Drost	<u>U545</u>	EPA-Support	(206) 593-6510
*******	Dave Einon	EP4	Unit Mar	(509) 376-3883
_	Donna Lacombe	PRC	EPA Contractor	(204) 624-2692
•	List Chetnik Treichel	DOE-HO		(301) 903-8177
The state of the s	Michael Frank	WHC		(509) 37-6-2731
C.	Dib Goswami	Ecology	O'll Manger	(509) 546-4301
\$	Richard A Carlson	<u>whc</u>	EEG 200/300 mgg.	(509)376-9027
1.07	Evic Goller	DOE-PL	OU Much	(509)376-7326
S.	Charles A. Brandt	PNL	Task 7 - FF-5	(mg) 374-5345
C74692	C.E. Cushing	PNL	Task 7- FF-5	1509) 376-9670
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Attachment #2

Attendance List

300-FF-1 and 300-FF-5 Operable Unit Managers Meeting February 27, 1992

	Name	Organization	Role Phone	
	McLeod, Bob	DOE-RL	Unit Manager	(509) 372-0096
3	Goller, Eric Triechel, Lisa	DOE-RL DOE-HQ	FF-5 UM	(509) 376-7326 (301) 903-8177
141444,p	McClung, Bill Clarke, Suzanne	SWEC SWEC	GSSC/RL GSSC/RL	(509) 376-1853 (509) 372-0630
	Knox, Kathy	CNES	GSSC/RL	(509) 376-5011
	Goswami, Dib	Ecology	OU Manager	(206) 493-9367
N	Einan, Dave	EPA	Unit Manager	(509) 376-3883
O .	Lacombe, Donna Drost, Brian	PRC USGS	EPA Support EPA Support	(206) 624-2692 (206) 593-6510
n	•		•••	•
V J	Hulstrom, Larry Frank, Michael	WHC WHC	O.U. Coordinator RI Assistant	(509) 376-4034 (509) 376-2731
	Henckel, George Downey, Hal	WHC WHC	O.U. Coordinator Program Office	(509) 376-1994 (509) 376-5539
V	Pool, Karl Carlson, Richard	WHC WHC	OSM	(509) 373–3137
>	car ison, Richard	WIIC	EEG 200/300 Mag.	(509) 376-9027
	Brandt, Charles Cushing, C.E.	PNL PNL	Task-7-FF-5 Task 7-FF-5	(509) 376-5345 (509) 376-9670

Attachment #3

UNIT MANAGER'S MEETING AGENDA 300-FF-5 OU February 27, 1992 9:00 - 10:30 EPA Conference Room

Introduction:

Status:

Action Items

Remedial Investigation

Schedule

_ Issues:

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о О Other Topics:

. Approach for Second Quarter Groundwater Sampling

Phased Approach to Aquatic Biota Sampling

Agreements and Commitments

Presenter - Larry Hulstrom

Attachment #4

Commitments/Agreements Status List

300-FF-5 Operable Unit

February 27, 1992

Item No.	Action	Status
3FF5.16	The summarized well construction data and the field observations of 300-FF-5 activities are to be transmitted to Ecology and EPA. Action: L. Hulstrom and E. Goller (1/23/92)	Closed Draft examples of information to be provided at this meeting.
3FF5.17	Copies of handouts on EMI, GPR, and seismic transect locations in the 300 Area are to be transmitted to Ecology and EPA. Action: J. Kunk and E. Goller (1/23/92)	Closed Information provided finclusion in Jan. UMM.

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WELL SUMMAF	RY SHEET	Boring or Well N Northing 1147 Sheet	to. 699-S29-E16C, (1C) 730.80 Easting 594742.44 1of2_	
Location 300 Area		ject <u>300-FF-5</u>	5	
Elevation 377.03		Dril	ling Contractor_	KEH
Driller D. Rossman		Drii	ling Method and	Equipment Cable Tool Well Master
Prepared by	Print Name)	Rev	viewed By	(Sign/Print Name)
(Sign/		Depth		(Sign/Print Name) GEOLOGIC/HYDROLOGIC DATA
Description	Well Construction	in Feet	Graphic Log	y
	20 (7)			0-3' SLIGHTLY SILTY SAND.
- Portland Cement from 0 to		-	₹	- 3-7' SANDY GRAVEL.
- 19.4'.		 -	0	- - 7-15' GRAVEL
		- 10		- 7-15 GRAVEL.
ļ-		-		-
ţ I				- 15-30' GRAVELLY SAND.
ļ-		-	-	-
Bentonite Crumbles from		- 20		<u>-</u>
19.4 to 32.2'.		F	□ :::1	μ Ξ
-		-		-
		30		
Bentonite Slurry from 32.2 to 137.5'.		-	• • • • • • • • • • • • • • • • • • • •	30-34.5' SANDY GRAVEL.
16" casing set at 39.8'.				34.5-41' SANDY, CLAYEY, GRAVEL.
4		F		-
.		_ 40		- - 41-57' GRAVEL
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7		-	1	- 57-59' SILTY GRAVELLY SAND
		60		- 59.4-75' SANDY GRAVEL.
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		_	<u> </u>	-
F		F		- 76-81' SANDY, GRAVEL.
<u> </u>		– 80		-
[\81-81.5' SAND. - 81.5-87' SILTY, SANDY, GRAVEL
-		-		- with alternating SAND.
<u> </u>		<u> </u>		87-100' SILTY, SANDY, GRAVEL.
12" casing set at 90.2'.		_ 30	-0.	-
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	WELL SUMMAR	Y SHEET	Boring or Well N Northing 1147 Sheet	o. 699-S29-E16C, (1C) 30.80 Easting 594742.44 of2			
Γ	Location 300 Area		Pro	ject <u>300-FF-5</u>			
	Elevation <u>377.03</u>		Dril	Drilling Contractor KEH			
l	Driller D. Rossman		Drii	ling Method and	Equipment Cable Tool Well Master		
	Prepared by(Sign/		Rev	riewed By	Date		
\vdash	(Sign/I		Depth	· ·	(Sign/Print Name) GEOLOGIC/HYDROLOGIC DATA		
H	Description	Well Construction	in Feet	Graphic Log	Lithologic Description		
F					100-119' SILTY, SAND.	-	
	10" casing set at 144.6'. Cement Slurry from 137.5 to 157.2'.		- 110 - 120 - 130 - 140 - 150 - 160				
	9" casing set at 174.7 ft 20-40 Silica Sand from 162.4 to 177.9'.		- 170 - - - -	- 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	- BASALT		
	TD= 177.9 FT.		- 180 - 190 - 190		TOTAL DEPTH IS 177.9'		
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		SAMPLE	CaCO3		COMPACTED	COMPACTED	DRY				
WELL	SAMPLE	DEPTH	CONC.	MOISTURE	POROSITY	SPECIFIC	DENSITY	PEBBLE	SAND	SILT	CLAY
NO.	NO.	(FT)	(%/g)	%	%	GRAVITY	(g/cc)	%	%	%	%
1C	BOOWN4	5	0.6	2.53	NR	NR	NR	.4	94.1	5.5	0.0
10	BOOWN5	9.9-11.7	1.0	1.15	16.60	2.74	2.28	67.1	25.2	7.7	0.0
1C	BOOWN6	15-17	0.2	2.97	37.25	2.80	1.76	29.8	68.4	1.8	0.0
1C	BOOWN7	17	0.4	40.60	NR	2.66	NR	11.2	23.4	48.4	17.0
10	BOOWN8	20.2-22.2	0.4	2.96	33.28	2.77	1.85	36.8	58.9	4.3	0.0
1C	BOOWN9	25-27	0.2	2.36	25.22	2.77	2.07	62.1	33.9	4.0	0.0
1C	BOOWPO	30-32	0.0	3.91	34.54	2.73	1.79	67.3	23.9	8.8	0.0
1C	BOOWP1	34.5-36.5	0.2	5.61	16.35	2.66	2.23	84.1.	11.8	4.1	0.0
1C	BOOWP2	41.5-42.5	0.2	2.67	NR	NR	NR	96.5	3,3	0.2	0.0
1C	BOOWP3	59.4-62	S0	5.60	11.83	2.66	2.35	76.9	19.9	3.2	0.0
10	BOOWP4	64-66	<u></u> \$0	+	NR	NR	NR	82.4	14.9	2.7	0.0
10	BOOWP5	70.5-72.5	S0	5.01 M	13.69	2.67	2.36	82.3	13.6	4.1	0.0
10	BOOWP6	75-76	S0	14.90 M	NR	NR	NR	12.0	66,3	21.7	0.0
10	BOOWP7	76-77	\$0	2.73 M	NR	NR	NR	14.0	82.3	3.7	0.0
10	BOOWCO	80-81.5	S 0	7.31 M	10.73	2.60	2.32	72.8	21.4	5.8	0.0
10	BOOWC1	81.5-82.5	<u>\$0</u>	6.02 M	NR	NR	NR	77.0	19.4	3.6	0.0
1C	BOOWC2	83.5-84	<u>so</u>	24.89 M	NR	NR	NR	0.0	91.4	8.6	0.0
1C	воомсз	85-87	S0	11.10 M	19.39	2.64	2.12	57.5	36.2	6.3	0.0

		SAMPLE	CaCO3	·	COMPACTED	COMPACTED	DRY				
WELL	SAMPLE	DEPTH	CONC.	MOISTURE	POROSITY	SPECIFIC	DENSITY	PEBBLE	SAND	SILT	CLAY
NO.	NO.	(FT)	(%/g)	%	%	GRAVITY	(g/cc)	%	%	%	%
1C	BOOWC4	100-102	SO.	19.89 M	34.62	2.70	1.77	.6	47.2	39.6	12.6
10	BOOWC5	105-107	S0	18.57 M	32.61	2.67	1.80	4.3	39.8	40.9	.15.0
10	BOOWC6	115-116.7	SO.	30.80 M	46.61	2.63	1.41	.4	72.1	24.5	3.0
10	BOOWC7	119-121	S0	40.68 M	52.90	2.67	1.26	4.5	20.2	59.3	16.0
10	BOOWC8	125-126.6	SO .	42.14 M	52.25	2.62	1.25	0.0	13.4	70.6	16.0
10	BOOWC9	130-132	S0	45.32 M	53.52	2.62	1.22	0.0	12.9	71.1	16.0
10	BOOWDO	135-137	SO_	47.51 M	55.82	2.63	1.16	0.0	21.6	66.2	12.2
10	BOOWD1	142-144	S0	47.34 M	55.30	2.65	1.19	0.0	13.7	70.3	16.0
10	B00WD2	145-147	SO	47.07 M	53.73	2.70	1.20	19.8	14.5	55.6	10.1
10	B00WD3	154.6-157	SO_	51.07 M	55.76	2.53	1.12	0.0	32.2	47.6	20.2
10	BOOWD6	160-161.5	S0	43.21 M	50.68	2.56	1.26	1.8	19.6	44.5	34.1
1C	BOOWD8	165-166.5	S0	23.64 M	30.98	2.67	1.84	10.2	53.0	34.9	1.9
10	BOOWD9	168-170	SO	22.98 M	. 39.31	2.76	1.68	11.6	80.0	8.4	0.0
10	BOOWF1	175-176	S0	22.21 M	NR	NR NR	NR_	13.7	80.9	5.4	0.0

^{*=}Analyses requested, but the condition of the sample was not acceptable for the test.

NR=Analyses not requested due to the sampling method utilized (drive-barrel vs split spoon).

+=Analyses not requested due to water added to hole during drilling or sample obtained from below the water table. M=Analyses mistakenly requested. SO=Analyses mistakenly not requested.

300-FF-5 Work Progress page 1 of 5

February 27, 1992

Remedial Investigation Activities

Well Drilling

Well Specifications for Tasks 2, 3, and 4

Activity Completed.

Groundwater Monitoring Wells

Activity Completed.

<u>Geologic Characterization Borehole</u>

Preparations are underway to initiate drilling, with a desired completion date of April 30, 1992. Depth of the borehole will be 165 ft.

Pumping Wells

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Drilling of aquifer test borehole 7T was initiated on February 11, 1992, with the installation of the 12" surface casing. The borehole reached total depth (TD) on February 20, 1992. Installation of the screen has been completed and the well is presently being developed. Initiation of the pump test is being planned for the first part of March. Drilling of borehole 4T will be initiated as soon as development of 7T has been completed.

The test plan for this activity that incorporates regulatory comments is presently at DOE for clearance approval. It will be made available as soon as it is cleared for release.

Existing Well Maintenance

Well remediation work has been completed on the initial 8 wells (1-1, 2-1, 3-9, 3-12, 4-1, 4-7, 4-9, and 6-1) that were identified. Change Form 300-FF-5-12 was submitted at the January UMM and has been approved. This addressed some of the field conditions that were encountered during remediation activities. Fitness for use surveys are once again underway in the second group of 25 wells. Surveys have been completed in 11 of these wells. This work has identified at least 5 other wells that require further remediation (1-2, 8-1, 8-2, 8-3, and 8-4). Efforts are being made to initiate this remediation work in the near future.

Task 1--Source Investigation

(Conducted in Source Operable Units)

February 27, 1992

O Remedial Investigation Activities (continued)

Task 2--Geologic Investigation

Task 2a - Geophysical Surveys

Work is continuing to reduce data gathered to date. Direction was provided to the geophysics team to concentrate efforts on acquisition and reduction of data for the suspected paleochannel location. A progress report was presented at the January UMM.

Task 2b - 300-FF-5 Wide Geological Characterization

Work continues to utilize the stratigraphic information gained from the new wells drilled to update the fence diagram for the 300 Area. A draft report describing this information is currently undergoing WHC internal review.

Task 3--Soil Investigation

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Surface Radiation Survey Task completed.

Soil Sampling and Analysis

Physical (Table 31) and chemical sampling (Table 35) of all new wells has been completed. The results of physical property testing are being tabulated and prepared for transmittal to the HEIS database. Samples from the last three wells are still at the laboratory being processed. A revised test plan to address leach and adsorption tests that will be conducted during FY 1992 is under WHC review. Additional WHC review and comment incorporation is necessary before the draft plans will be ready for informal regulatory review.

Task 4--Groundwater Investigation

Task 4a - Hydrostratigraphy

Task 4b - Contaminant Distribution in Soil and Groundwater

The first round of groundwater sampling for CERCLA needs in the 300 Area (63 wells) was completed on January 16. The first round 300-FF-5 samples are being analyzed to analytical level IV (CLP), while the 20 wells sampled by RCRA are being analyzed to analytical level III (SW-846).

Plans are underway for the initiation of the second round of groundwater sampling which is scheduled to begin in mid March and be completed by the end of April. Additional discussion of the details will be provided as an attachment to this meeting.

February 27, 1992

O Remedial Investigation Activities (continued)

Task 4c - Hydraulic Properties

Thirty transducers (10 additional since last month) have been installed in wells 1-1, 1-7, 1-8, 1-9, 1-10B, 1-16B, 1-18A,B,C, 2-1, 3-9, 3-12, 4-1, 4-7, 4-9, 1A,B,C, 3A, 4A,B,C, 5A,B,C, 6-1, 7A,B,C, and 8A thus far. The transducer at the river monitoring station (SWS-1) has been receiving data since November 7. This leaves only 4 transducers to be installed. Two need well remediation prior to installation (1-2, 8-1) and 2 are near overhead powerlines (2-2, 5-1).

Task 4d - Aquifer Intercommunication - Well 399-1-16D

Several meetings have been held during the last month to evaluate VOA data from wells in the vicinity of 16D. Preliminary unvalidated data from the first round of sampling indicate elevated levels of TCE and DCE present in wells 16B and 16C. Data from surrounding wells, including newly constructed wells, are at detection limits. A limited field screening effort to obtain weekly data for one month from 16B and 16C has been initiated through PNL to help substantiate the first round CLP data. Geologic information is also being evaluated. This data must be obtained before the 16D remediation plan can be finalized. The present schedule for completion of remediation of this well has been delayed by two months until June, 1992 to address these issues.

Task 4e - Groundwater Modeling

Modelling efforts continue on schedule.

Task 5--Surface-Water and Sediment Investigation

Task 5a - Relative Data Compilation

Initiated in conjunction with site wide work and the 100 Areas. A draft report for WHC review was received in mid November. This information will be included in the project files for use during the data evaluation phase.

Task 5b - Riverbank Springs

The river stage level continues to be at high levels which have prevented the acquisition of spring samples. Monitoring of the SWS-1 monitoring station will continue and sampling will occur when a low period can be predicted (likely next August to September). An update on the river stage level is attached. Geodetic survey of the spring locations is scheduled to occur within the next two weeks.

Task 5c - Near Shore River Water and Sediment

Approximately 40 near shore river water samples (defined in Table 6 of the SAP) will be taken during the completion of Task 5b, and submitted to OSM for analysis. This work can not be accomplished until Task 5b is performed in order to provide the correlation with the riverbank springs.

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February 27, 1992

0 Remedial Investigation Activities (continued)

Task 5d - Transect River Water

Coordination with the L-045 Project for the Process Sewer effluent treatment facility will continue. Assessment of the data obtained from this work will define further characterization activities. A copy of a draft report on the results of characterization activities was received for review on January 14.

Task 5e - River Stage

One of the two river stage measurement stations (SWS-1) has been active since November 7, 1991. The location of station SWS-2 has been confirmed. Based on an evaluation performed by PNL after review of the draft report written by C. Sherwood it is not advisable to place the second station at SWS-2 because of its close proximity to SWS-1 (approximately 1/2 mile apart). Alternatives are still being discussed.

Task 5f - Boundary Conditions Along the Columbia River

Scheduled for FY 1992, if required.

Task 5g - Numerical Algorithms for Groundwater to Surface Water Dispersion

Scheduled for FY 1992, if required.

Task 6--Air Investigation

(Conducted in Source Operable Units and in coordination with well drilling activities.)

<u>Task 7--Biota Investigations</u>

Riparian Plants

All (199) of the plant tissue samples (willow and mulberry tree, and reed canary grass) to be collected as part of the subtask for Riparian plants have been sampled. An additional 31 samples were collected at the spring locations. They will all be analyzed for metals and radionuclides as described in Table 8, Section 3.2 of the SAP. A total of 22 sample locations were identified. All of the samples have now been sent to TMA/Norcal for analysis.

Aquatic Biota

At the present time sampling has been completed at 4 of 12 stations identified in the work plan for periphyton. The remaining 8 stations have been placed and will be sampled during the second round of sampling. An update on the schedule and types of biota to be sampled will be provided at this meeting. Change Form 300-FF-5-13 has been prepared to address the proposed phased approach to aquatic biota sampling.

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300-FF-5 Work Progress

page 5 of 5

February 27, 1992

O Remedial Investigation Activities (continued)

Task 8--Data Evaluation

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§ € Performed with data available from the RI when gathered, and supplemented as new information becomes available.

Task 9--Baseline Risk Assessment

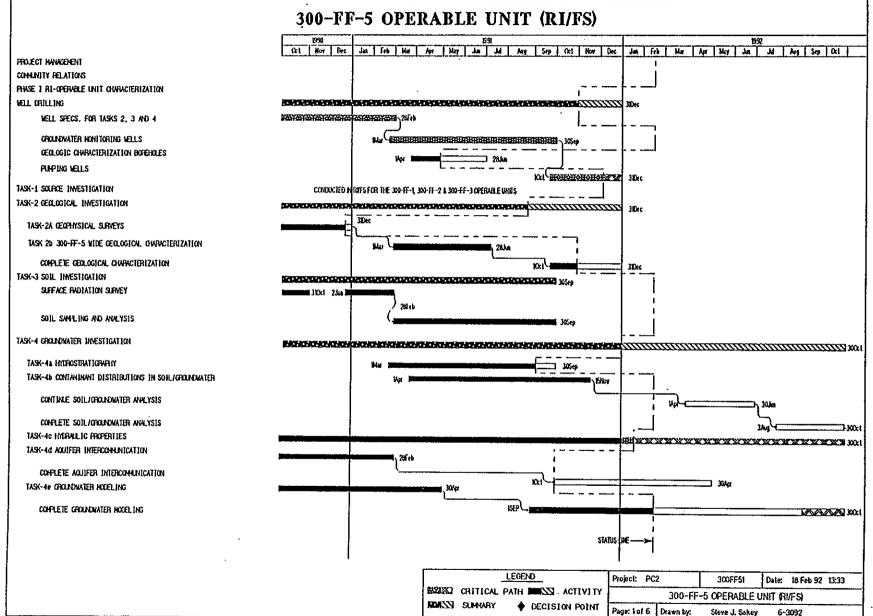
Efforts will be initiated soon to begin this task with available data. The site wide methodology being developed as part of Milestone M-29-00 will be utilized as soon as it becomes available. Development of the 300-FF-5 risk assessment has been initiated in conjunction with the risk assessment for the 300-FF-1 OU.

Task 10--Preliminary Site Characterization Summary Report

Task 10a - Draft Report Task 10b - Final Report

Phase 1 Feasibility Study - Remedial Alternatives Development

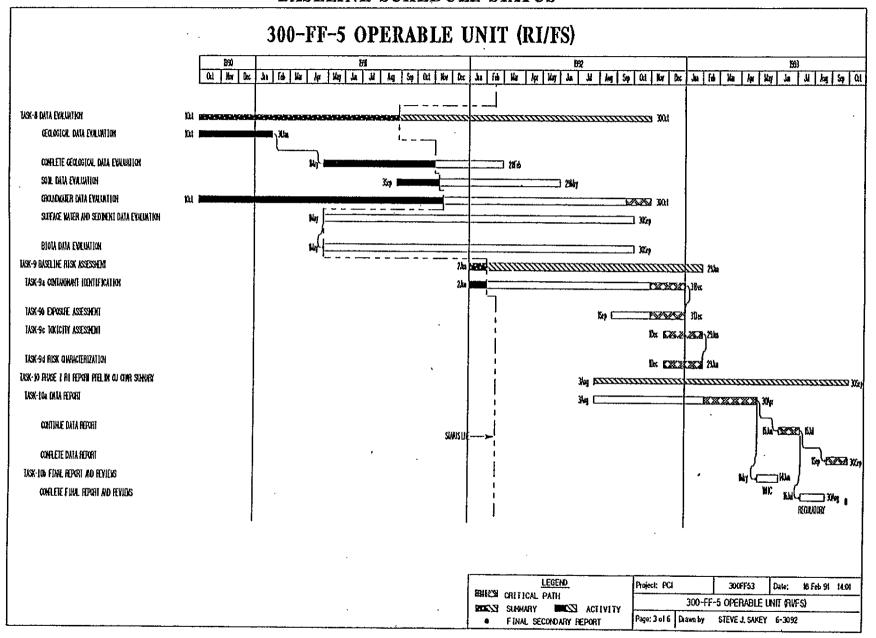
Efforts will be initiated soon to begin this task with available data.



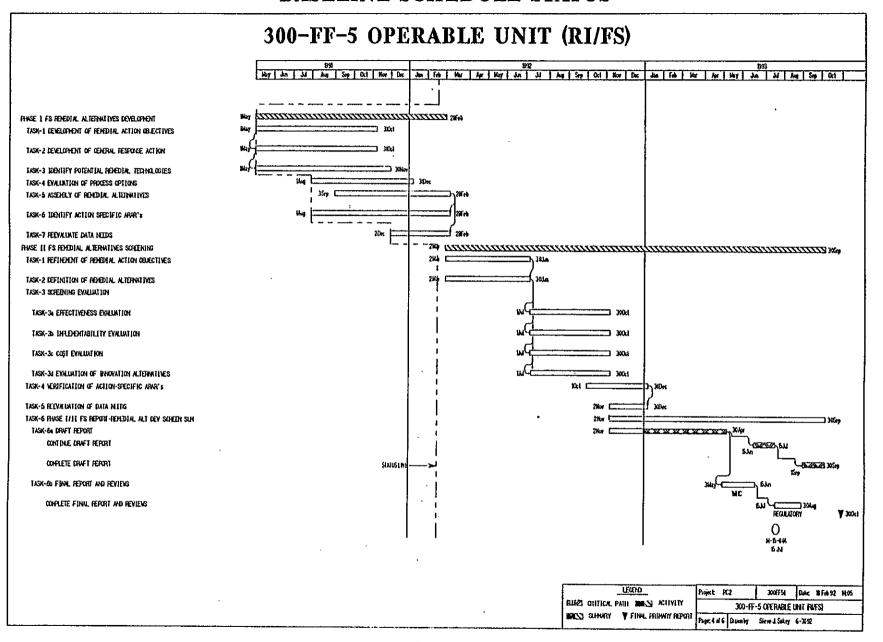
9 2 1 2 5 6 2 1 7 2 6 BASELINE SCHEDULE STATUS

300-FF-5 OPERABLE UNIT (RI/FS) Oct Nov Dec Jan Feb Nu Apr Navy Jan Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jan Jul Aug Sep Oct TASK-5 SUFFACE VATER AND SEDIMENT INVESTIGATION TASK-54 PELATIVE DATA COMPILATION TASK-56 RIVERBANK SPRINGS CONTINUE RIVERBANK SPRINGS ANALYSIS CONTINUE RIVERBACK SPRINGS ANALYSIS CONFLETE RIVERBANK SPRINGS ANALYSIS TASK-5¢ NEAR SLOTE RIVER WATER AND SEDIMENT TASK-54 TRANSECT RIVER WATER TASK-5e RIVER STACE TASK-SF BOUNDARY CONDITIONS ALONG COLUMBIA RIVER ♦ 2Hz TASK-59 NAMERICAL ALGORITIMS CHOUNDMATER/SLIPFACE \$ 2la TASK-6 AIR INVESTIGATION CONDUCTED IN RIJES FROM 300-FF-1, 300-FF-2 AND 300-FF-3 GERMALE UNITS TASK-7 BIOTA INVESTIGATION WARE CONTROLLED TO THE CONTROL TH ACUATIC BIOTA CONTINUE AGUATIC BIOTA CONTINUE ACUATIC BIOTA CONTINUE AQUATIC BIOTA RIPARIAN ZONE PLANTS STATUSLNE LECEND Project: PC2 300FF52 Date: 18 FEB 52 13:55 CRITICAL PATH MISS ACTIVITY 300-FF-5 OPERABLE UNIT INVEST BECISION POINT Page: 2 of 6 Diamater Steve J. Sidey 6-3092

9 2 1 2 5 6 2 1 7 2 7 BASELINE SCHEDULE STATUS



9 2 1 2 5 6 2 1 7 2 8 BASELINE SCHEDULE STATUS



BASELINE SCHEDULE STATUS

300-FF-5 OPERABLE UNIT (RI/FS) Sep Oct Nov Dec Jan Feb Naz Aga Nay Jun Jul Aug Sep Oct How Dec Jun Feb Naz Aga Nay Jun Jul Aug Sep Oct PLASE II RI-THEATABILITY IMPESTIGATION TASK-1 TREATABILITY INVESTIGATION WORK PLAN DEVELOPMENT MK (2007) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | DOLL THE PROPERTY OF THE PROPE TASK-1a DRAFT PLAN KAN RESERVED NAME CONTINUE WORK PLAN DEVELOPMENT Dia (Secret) all CONFLETE WORK PLAN DEVELOPMENT TASK-16 FINAL PLAN AND REVIEWS MIC CONFLETE FINAL PLAN TASK-2 TREATABILITY INVESTIGATION INPLEMENTATION My BYTTYYYYYYYYYYYYYY Mo TASK-3 RI REPORT TASK-31 DRAFT REPORT To EXAMPLE THE CONTINUE DRWFT REPORT 511 KXXXI-1544 CONTINUE DRAFT REPORT 30d &CXXXX 30d TASK-36 FINAL REPORT AND REVIEWS WIC CONFLETE FLAVL REPORT Wy4 REGULATORY Dec LEGENO Project: PC2 300FF55 Date: 18 Feb 92 14:06 DECISION POINT FINAL PRIMARY REPORT 300-FF-5 OPERABLE UNIT (RI/FS) CRITICAL PATH MARY SUMMARY ACTIVITY Page: 5 of 6 Drawn by STEVE J. SAKEY 6-3092

9 2 1 2 5 6 2 1 7 3 0 BASELINE SCHEDULE STATUS

300-FF-5 OPERABLE UNIT (RI/FS)

PHASE III FS-FEMEDIAL ALTERNATIVES ANALYSIS
TASK-1 DEFINITION REMEDIAL ALTERNATIVES
TASK-2 DETAIL ANALYSIS OF FEMEDIAL ALTERNATIVES
TASK-2a SHORT-TERM EFFECTIVENESS ANALYSIS
TASK-2b Long-Term Effectiveness analysis

TASK-20 ANALYSIS OF REDUCTIONS IN WASTE TOXICITY Etc.

TASK-2d IMPLEMENTABILITY ANALYSIS

TASK-2e COST AMALYSIS
TASK-2f AMALYSIS OF COMPLIANCE WITH APAR'S

TASK-2g ANALYSIS OF OVERALL PROTECTION OF PUBLIC HEALTH

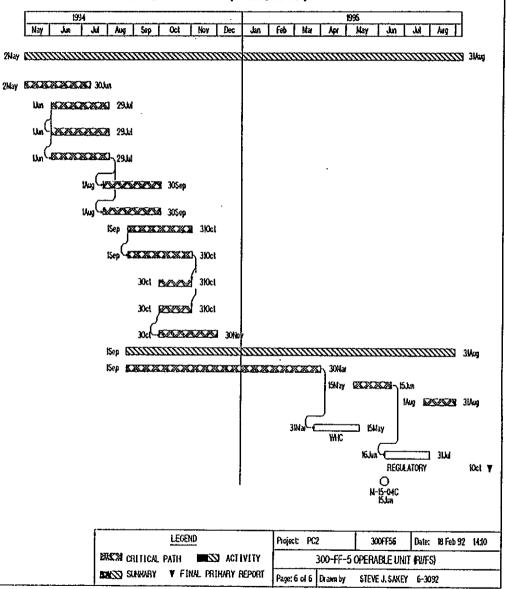
TASK-2h ANALYSIS OF ENVIRONMENTAL AGENCY ACCLPTANCE

TASK-21 ANALYSIS OF CONMUNITY ACCEPTANCE

TASK-3 COMPARISON OF REMEDIAL ALTERNATIVES
TASK-4 DRAFT FS REPORT AND PROPOSED PLAN
TASK-4a DRAFT REPORT AND PLAN
CONTINUE DRAFT REPORT
COMPLETE DRAFT REPORT

TASK-4D FINAL REPORT, PLAN AND REVIEWS

COMPLETE FINAL REPORT



L.C. HULSTROM FEBRUARY 27, 1992 PAGE 1 OF 2

PLAN FOR SECOND ROUND GROUNDWATER SAMPLING FOR 300-FF-5

- 1. 63 wells (Attachment 1, column 1) will be sampled. Same as first round. Sampling will be initiated in mid March.
- 2. Continue use of CLP methods of analysis.
- 3. Use the same laboratories that were used for the first quarter. i.e., use TMA as the main lab and Weston as the split lab.
- 4. Perform the analyses required to obtain the contaminants of concern (Table 25 from the work plan) on the same 29 wells that were done for the first round of sampling (Attachment 1, column 4). Based on agreement reached April 10, 1991.
- 5. Perform the analyses required to obtain the full list (Table 35 from the work plan) for 34 wells (Attachment 1, column 3) listed with the following exceptions:
 - a) eliminate analysis for semivolatiles there is no historical evidence or analytical data that supports the presence of these constituents in 300-FF-5

b) eliminate CLP analysis for Cyanide

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- c) eliminate radionuclide analyses for I-129, Tritium, and Plutonium.
- 6. Perform BOD and coliform analysis at HEHF to insure that holding times are met.
- 7. Insure that samples from the first round that were cancelled or otherwise flagged due to errors during that round are repeated and collected correctly. i.e., sample BO1F17 from well 3-1-7, sample BO1F42 (Split 3 sent to Weston), etc.
- Insure that TOC and TOX samples are sent to Weston.
- 9. QA/QC sampling shall be performed in the same manner as done for the first round of sampling.

PLAN FOR SECOND ROUND GROUNDWATER SAMPLING FOR 300-FF-5 - CONTINUED

10. RCRA/CERCLA INTEGRATION: For the following wells take sufficient sample to split and send to a lab capable of performing the noted analysis according to SW-846 methods. Also include a duplicate sample for each:

3-1-5	VOA Method 8240	
3-1-16B	VOA Method 8240	
3-1-16C	VOA Method 8240	
3-2-1	VOA Method 8240	
3-2-2	VOA Method 8240	
3-1-17B	Metals analysis	6010
3-1-19	Metals analysis	6010
3-2-2	Metals analysis	6010
3-3-9	Metals analysis	6010
3-4-7	Metals analysis	6010

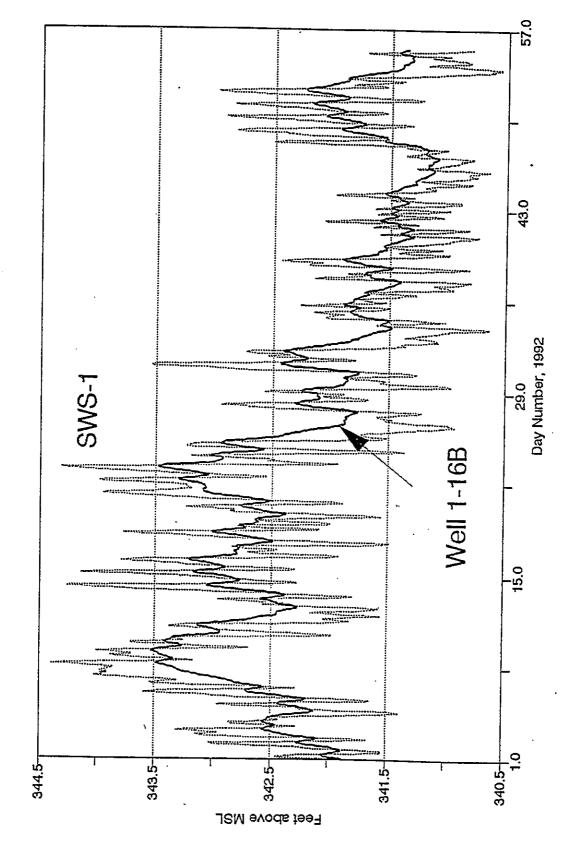
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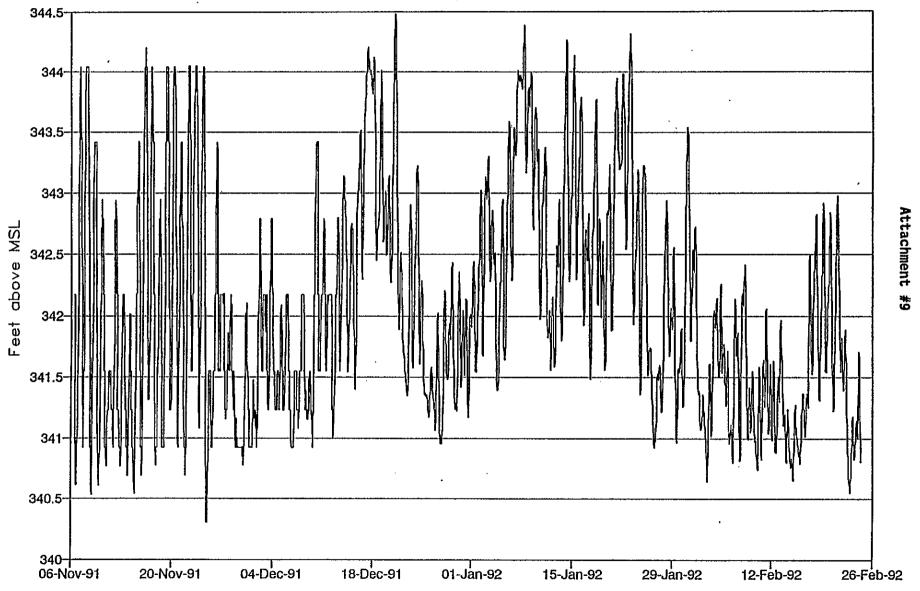
Note that it is the intent to compare the data from these SW-846 analyses to that from the CLP analyses to assist regulatory comparisons between these two methodologies. The data packages received for the SW-846 analyses will include a full stand-alone deliverable (OSM's Level C). Weston will perform the SW-846 analyses while also acting as the split laboratory for the CLP analyses. TMA will be the primary laboratory performing the CLP analyses.

Attachment #8



Water Level Elévation in the 300 Area SWS-1 and Well 1-16B

300 Area River Stage Fluctuations Nov. 6, 1991 through Feb. 24, 1992



rage 1 of 1

Per Action Plan for Implementation of the Hanford Consent Order and Compliance Agreement Section 9.3

Lead Regulatory Unit Manager

Distribution

300-FF-5 Operable Unit Managers Meeting February 27, 1992

Ronald E. Gerton Roger D. Freeberg Steven H. Wisness	• • • • • •	Director, DOE-RL, ERD (A5-19) Director, DOE-RL, WMD (A4-02) . Chief, Rstr. Br., DOE-RL/ERD (A5-19)	
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Ward Staubitz			
Donna Lacombe			
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Please inform Suzanne E. Clarke (SWEC) of deletions or additions to the distribution list.